

SUMMARY OF THE TRIVIUM

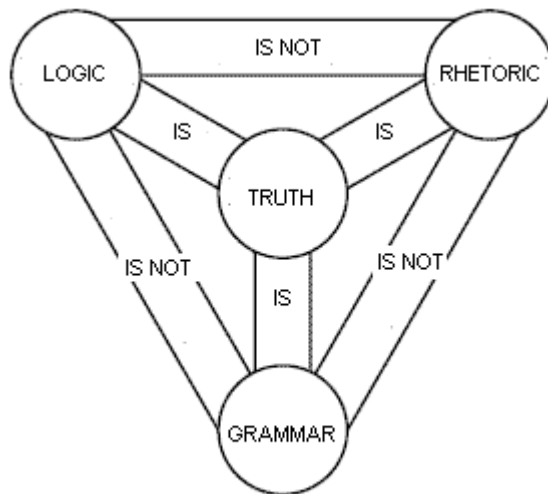
*The Trivium, the first three of the seven Liberal Arts and Sciences - grammar, logic, and rhetoric - are integrated as a method to train the **mind** to learn and think systematically. The trivium can be called the art and science of the mind. The Quadrivium, the last four of the Liberal Arts and Sciences - arithmetic, geometry, musical theory, and astronomy - study **matter** which alone possesses extension in space (mind does not possess the quality of extension) that can be quantifiably measured. The quadrivium can be called the art and science of matter and measurement. From the human perspective, mind and matter form the total of reality.*

> The work and effect of the trivium is yielding truth about the universe and of ourselves. That is, knowledge, understanding, and wisdom are applied to realize either specific or universal truths. By practicing and applying the trivium, a strong sense of conviction in allowing the truth to surface is encountered, even in the face of adversity. When the truth is discovered - knowledge, understanding, and wisdom will have been realized in reciprocity. We become "independent" students and thinkers.

The mastery of any one of the three constituents of the trivium is not itself a sufficient goal. That is, mastery of grammar is not a goal in itself. Neither are mastery of logic nor rhetoric goals in themselves. It is best to compare the effectiveness of the trivium to a computer system. The computer's keyboard and mouse enter raw data discursively into the system to be processed - this is the computer's grammar. The central and auxiliary processors apply the appropriate reasoning procedures to differentiate or to integrate the raw data - this is the computer's logic. The monitor and printer display the conclusions of the processed data to yield useable information - this can be likened to the wisdom or rhetoric output of the computer. Any one of the three major computer components - the input, processing, and output device - is not necessarily useful by itself, but exceeding so as a whole system.

The subjects of the trivium are to be *learned* separately, but in order to yield consistent truth, they must be *applied* as an integral method; it is a system, as is a computer. Ideally, the trivium will become an internalized, automatic pattern of fundamental thinking. Picture the three subjects comprising individual nodes on a spiral structure leading up to the concept of Truth as the uppermost, fourth node. When using the methodical system in this configuration, one's thoughts shuttle back and forth, up and down, and in view of various pairs of nodes as mental connections are made in the attempt, or in the fact, of finding truth. However, the trivium method is also consistent with human error. The power of the trivium is such that if an error has been made in coming to an integral conclusion, the truth will eventually be surrendered if the method is consistently applied over time when new, more pertinent data is placed into the appropriate node(s) of the structure.

"IS NOT" is applicable in learning; "IS" is applicable in analysis and synthesis to yield "TRUTH".



This is a view of the spiral from above with grammar at the base and truth at the summit.

Substitute any of the following into the proper nodes:

- 1] **Grammar**.....Knowledge.....Gather Data.....Observe.....Discover
- 2] **Logic**.....Understanding.....Reason.....Infer.....Prove Relationships
- 3] **Rhetoric**.....WisdomState Conclusion.....Actualize.....Concretize

As a matter to contemplate, when a person develops the trivium pattern of thinking, he can actualize the precepts in The Serenity Prayer which recognizes a central principle in human life.

Review of the Three Modes of Thought

At the point a student becomes conversant with the methods of *how* to systematically learn and think with the trivium, he can now more competently explore the subjects which suggest to us *what* to think. Note: one does not need to be an "expert" in the methods of the trivium, but only "conversant" with all three of the methods in order to use this pattern in more deeply penetrating the meanings and values of the "what" subjects.

The most general of these subjects (here called "modes"), under which all other more specialized -content subjects are subsumed, are the modes of [1] the Mytho/Poetic (Mythopoeic), [2] the Philosophic, and [3] the Scientific. Although these modes now overlap one another in content, they originally developed in a chronological order and can be seen as consisting of a trivium structure in themselves. Again, like the Trivium, these broad subjects, especially philosophy, can be applied as a general framework with which to view all other subject matter as well as one's own thinking (i.e., these topics have universal application).

> The **mythopoeic**, which is fundamentally "literature" in all of its forms, is the grammar of general-content knowledge. As the first attempt in coming to know the processes within our own minds and in the workings of our surrounding, material universe, it gathered data and attempted to make sense of it by *comparing* those data among themselves and to any mental construct which could be subjectively imagined. The comparisons are called "analogical" or analogies. Metaphor and simile are the methods of mythology and poetics.

Being the first development, this mode is the least structured of the three - and that is its strength. The effect of the mythopoeic is that it opened the entire range of questions of which men are capable of asking, be they of factual topics or in flights of the imagination.

> The **philosophic** mode was made possible by the grammatical organization undertaken by the mythopoeic approach. As bodies of knowledge were built over periods of multiple generations and communicated in an oral fashion (drama, song, and poetry being used as mnemonic devices), a limit to the amount of information which could be stored in human memory was eventually encountered.

Writing then developed and acted as a store-house with which to pass vast amounts of information through the ages. When sufficient amount of this information formed to a critical mass, new and innovative ways of analyzing and synthesizing these bodies of knowledge were made possible. Philosophy devised the passage from the *analogical* to the *logical* form by being able to scrutinize phenomenal occurrence directly to its own nature (a thing does what it does because of what it is: the Law of Causality) rather than through more inexact comparisons (i.e., at times having to compare apples to oranges). For example, in times past, an earthquake was shown by analyzing large sums of accumulated factual-data to be the product of natural, geological interactions instead of being caused by the "wrath of the gods", to which it was previously compared (its causal analog). Greater *understanding* was present in the philosophical mode due to its validated manipulation of stored data through the developed rules of logic.

By posing four logically sequenced questions, the discipline of philosophy, or the love of wisdom, was formed into four branches:

1] What is? (**Metaphysics**)

2] *How* do we know -- what is? (**Epistemology**)

3] Based on the first two answers, what do we do? (**Ethics** - Individual & Civil)

4] How do we communicate these abstract answers in concrete form? (**Aesthetics**)

(This should de-mystify the *big words* used to classify the philosophical branches and also illustrate their interrelationship.)

As the subject has evolved, the core and purpose of a philosophy is to answer the third question. In a well conceived philosophy the question is: how can **ethics** develop a moral code to guide us in living in a condition of concordant partnership and prosperity with one another and with universal reality?

Plato, the ancient Greek philosopher, is given credit for organizing the system of Western Philosophy into the four branches outlined above. His expression was to say that philosophy can guide one along the paths of Truth, Goodness, and Beauty.

A proper metaphysics and epistemology would point toward Truth. An ethics derived from that truthful metaphysics and epistemology would point toward Goodness and Justice. A proper aesthetics, reflective of a good and just ethics, would eloquently and concretely communicate these abstract ideas through the Seven Fine Arts of 1] fine painting, 2] sculpture, 3] architecture, 4] music, 5] dance, 6] drama, and 7] poetry (and literature).

By applying the four philosophical questions - what is (it), how do we know, what do we do, and how do we communicate our findings [?] - virtually any established subject can be understood in its essence. So, there are self-intelligible philosophies of mathematics, of religion, of science, of economics, of history, of ethics, of ice hockey, etc., etc. Philosophy systematically "qualifies" the content of either general modes or specialized subjects as *comprehensive* knowledge (i.e., knowledge understood).

> The **scientific** mode, stating the obvious, was made logically possible by the development of logic in philosophy. The *scientific-method mode*, to name it more accurately, concerns itself rigorously with the factual, material realm. Because the results of scientific enquiry must be *wisely demonstrated* in the physical, material world - the sphere in which logic and our five senses are operative - only facts, not fancy, are applicable in this mode. Science brings together the knowledge which can be materially measured or *quantified*. The effects of scientific and technological advancement - the human control of Nature by coming to know and obey her principles - are all around us and too numerous and apparent to enumerate.

There is a very subtle dynamic at work within the structure of the scientific method which provides its effectiveness.

Scientific Method of Inquiry

- 1] Observe to gather data.....this is a process in Reality
- 2] Hypothesize to attempt an answer.....this is a Mental process
- 3] Extrapolate to devise experiment.....this is a Mental process
- 4] Conduct a repeatable Experiment.....this is a process in Reality

The succession; from observation in reality, to two (progressive) intermediate mental processes, and finally back to reality for demonstration has been found to be the most efficient method of query into the physical universe. Below are a very few of many applications of this sequence (notice that steps #1 and #4 occur in objective reality and #2 and #3 occur in a subjective mentality):

<i>Engineering</i>	<i>Medicine</i>	<i>Military Tactics</i>
1. Analyze facts	1. Observe symptoms	1. Time to define battle field objective
2. Design	2. Diagnosis	2. Time to think (brainstorm)
3. Development (blue-print stage)	3. Prognosis	3. Time to plan
4. Implementation or production	4. Prescribe treatment	4. Time to execute plan

Much as each of the topics of the trivium can be applied independently (but to much better effect as an integrated whole), so have these general "modes" been applied independently . . . thus far. We have not yet learned to blend, integrate, and concretize the total power of technological work directed by an optimal ethic while coupled with the motivation of supreme imagination. Said in the mythopoeic tradition, to close the circle - we have not yet learned to harmonize the hand, the head, and the heart.